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Attorney Docket RSW920030196US1

IN THE UNITED STATES PATENT & TRADEMARK OFFICE

In re application of James M. Mathewson II et al.

May 8, 2006

Serial Nbr: 10/666,287

Filed: September 19, 2003

For: Using Radio Frequency Identification with Transaction-Specific Correlator
Values to Detect and/or Prevent Theft and Shoplifting

Art Unit: 2876

Examiner: Ahshik Kim

APPELLANTS' REPLY BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P. O. Box 1450
Alexandria, VA 22313-1450

Sir:

This Reply Brief is submitted in furtherance of the Appeal Brief that was filed in this case on November 4, 2005.

The fees required under 37 C. F. R. §1.17(c), and any required petition for extension of time for filing this brief and fees therefor, are dealt with in the accompanying **TRANSMITTAL OF REPLY BRIEF**.

DISCUSSION

1. Appellants respectfully submit the following comments on the Examiner's Answer dated March 10, 2006 (hereinafter, "the Examiner's Answer").

2. Appellants note that the Examiner's Answers fails to meet requirements specified in §1207.02, "Contents of Examiner's Answer", of the Manual of Patent Examining Procedure ("MPEP"). Under the heading "(9) Grounds of Rejection", section (d), §1207.02 of the MPEP states "For each rejection under 35 U.S.C. 103, the examiner's answer must (i) state the ground of rejection and point out where each of the specific limitations recited in the rejected claims is found in the prior art" (emphasis added). Nowhere in the Examiner's Answer is "each of the specific limitations" in Appellants' claim language addressed with this level of detail. (For example, there is no citation for the "creating" limitation on lines 3 - 4 of Claim 1, or the "storing" limitation on lines 5 - 7 of Claim 1, and no citation for the "locating" and "concluding" limitations in Claim 3.) Furthermore, Appellants' independent Claims 1 and 3, which specify different limitations, are not separately discussed in the Examiner's Answer. See Page 4 of the Examiner's Answer, lines 1 - 9: none of this discussion (nor any of the discussion that continues to Page 5, line 16 of the Examiner's Answer) presents the claim language of the specific limitations recited in Appellants' rejected claims, and therefore, Appellants respectfully submit that the discussion fails to point out where each of the specific limitations is found in the prior art, in violation of §1207.02 of the MPEP.

3(a). In the Examiner's Answer, the Examiner has apparently retracted an admission that was

provided in the Final Office Action dated June 23, 2005 (hereinafter, "the Final Office Action"), after Appellants had relied on this admission in their response to the Final Office Action (said response submitted on August 5, 2005, hereby incorporated herein by reference, and referred to hereinafter as "Appellants' response to the Final Office Action") and in their Appeal Brief dated November 4, 2005 (hereinafter, "Appellants' Appeal Brief"). In particular, the Examiner's Answer states on Page 4, lines 10 - 12, that "Otto discloses that RFID tags contain a correlator -- albeit purchase information" (emphasis added), whereas on Page 3, lines 7 - 8 of the Final Office Action, the Examiner admitted that "Otto fails to specifically teach or fairly suggest that the RFID tags contain a correlator value which indicate that the group of items are purchased together" (emphasis added).

3(b). Because Appellants relied on this admission on Page 3, lines 7 - 8 of the Final Office Action, Appellants did not provide arguments in Appellants' Appeal Brief to support their position that Otto fails to teach or suggest that RFID tags contain a unique correlator value (created for a current transaction, as specified in Appellants' independent Claim 1 and analogous independent Claims 8 and 15, or previously written therein as a unique, transaction-specific value, as specified in Appellants' independent Claim 3 and analogous independent Claims 10 and 17). Because the Examiner is apparently now retracting this admission, Appellants respectfully present arguments herein (paragraphs 3(a) - 3(f) of this Reply Brief) to support their position that neither Otto nor Loof discloses the unique correlator values, and use thereof, as claimed in Appellants' independent claims. Notably, in Appellants' response to the Final Office Action, Appellants argued that neither date and time nor a customer's location provides a unique

correlator value for a transaction -- in contrast to the limitations on line 3 of Appellants' independent Claim 1 and on line 4 of Appellants' independent Claim 3. (See Page 12, lines 7 - 12 and Page 13, lines 7 - 10 of Appellants' response to the Final Office Action.) This prior argument was presented by Appellants in terms of Loof, but applies equally to Otto, as will now be discussed to refute the Examiner's newly-provided retraction of his prior admission. Otto discusses, at col. 2, lines 32 - 36, the "date and time of purchase, location of purchase, and seller" (and refers to these items therein as "label and product identification information and various amounts of additional information"). However, as Appellants previously discussed with regard to Loof (in the above-cited portion of Appellants' response to the Final Office Action), these items discussed by Otto do not teach or suggest Appellants' "unique correlator value, [created] for a current transaction ..." (Claim 1, line 3, emphasis added) or Appellants' "correlator value previously written [in an RFID tag] as a unique, transaction-specific value" (Claim 3, line 4, emphasis added). For example, as noted by Appellants (in Appellants' response to the Final Office Action, Page 13, lines 8 - 10), "in a large store, a number of customers might purchase items simultaneously, in which case the date and time of purchase for transactions of these customers would be identical (i.e., not unique)" (emphasis original).

3(c). See also Page 8, lines 1 - 11 of the Examiner's Answer, where use of time and date for generating a unique correlator value is further discussed by the Examiner in response to Appellants' arguments in Paragraph 25 of Appellants' Appeal Brief. In these lines on Page 8, the Examiner states that "The location [of purchase] can be a store ID, and more likely includes a register number and a sales clerk identification" (Examiner's Answer, Page 8, lines 5 - 6.).

Appellants respectfully note that this is a mere assertion of the Examiner, as no basis for this interpretation of “location of purchase” is provided in Otto. Furthermore, Appellants have explained in detail, in their Amendment/Response dated April 11, 2005 (hereinafter, “Appellants’ Response to the Non-Final Office Action”, which was incorporated by reference into Paragraph 10 of Appellants’ Appeal Brief), that Otto discusses using information stored in RFID tags to determine whether “purchase information” stored therein is from a different store. If the item was purchased at a different store, and only then, the purchase information is investigated, according to Otto’s text -- for example, so that promotional information can be provided to the purchaser (see, for example, col. 2, lines 50 - 55 of Otto). Otherwise, when the item was purchased at the current store, Otto teaches that the purchase information stored in the RFID tag is not further investigated. See Page 14, line 10 - Page 15, line 12 of Appellants’ Response to the Non-Final Office Action.

3(d). The Examiner continues his discussion of date and time by referring to col. 2, lines 39 - 40 of Otto, and states (Examiner’s Answer, Page 8, line 6 - 7) that “In order to process a return ... an item must have information amounting to paper/electronic receipt”. Appellants respectfully note that their claim language does not specify any limitations that discuss “process[ing] a return” nor does the claim language specify any limitations that pertain to returning an item or items. Accordingly, this reference (apparently to Otto’s “return station computer”) is deemed irrelevant.

3(e). The Examiner further states (Examiner’s Answer, Page 8, lines 8 - 11) that “Product or

transaction related information stored in the RFID label is clearly disclosed” by Chenoweth, U. S. Patent 6,019,394 (which Appellants note was not identified as a new ground of rejection in the Examiner’s Answer) which is referenced at Otto, col. 1, lines 16 - 20. The Examiner states that “Chenoweth discloses storing purchase information, exchange information ... and purchaser, store location and other information ... which is sufficient to be unique”. Appellants respectfully disagree with this newly-presented argument. Chenoweth states at col. 2, lines 25 - 27, that the “information” stored in his “multiple function interactive product label (MFIPL)” may include “the product’s inventory number, the date and location of the purchase, the purchase price, and return information”. If the product’s price is included in the stored information, as taught by Chenoweth, then it is clear that this is product-specific information, and not a “unique correlator value, for a current transaction” as claimed by Appellants in line 3 of independent Claim 1 (emphasis added) or a “correlator value ... as a unique, transaction-specific value” as claimed by Appellants in lines 4 - 5 of independent Claim 3 (emphasis added).

3(f). Accordingly, Appellants respectfully disagree with the Examiner’s newly-presented contention that Otto discloses that RFID tags contain a correlator.

4(a). On Page 5, lines 7 - 16 of the Examiner’s Answer, newly-provided motivation for combining the references is presented (beginning at “Some purchases involve more than one item.” on line 7 and continuing through the end of line 16). Appellants respectfully submit that this motivation is flawed, as will now be described herein in paragraphs 4(a) - 4(e).

4(b). The “item return” scenario which is described by the Examiner on Page 5, lines 7 - 16 of the Examiner’s Answer does not pertain to Appellants’ claimed invention. See, for example, the preamble of independent Claims 1 and 3, stating that the methods specified in these claims are directed toward “theft detection” and “detecting potential theft”, respectively. Furthermore, Appellants respectfully submit that one of skill in the art would not, in fact, be motivated to attempt a combination of Otto and Loof by the scenarios set out by the Examiner.

4(c). The Examiner states that a “computer system” could be purchased, and then apparently disassembled by an “unscrupulous customer ... to refund the items individually later for fraudulent gain”. The Examiner fails to explain whether the items making up the “computer system” (such as the computer, monitor, printer, and other peripheral devices) each have their own RFID tag. If they do, then (as specified in Claim 1, lines 3 - 7) the unique, transaction-specific correlator would be written into those RFID tags. With reference to Appellants’ **Fig. 9A**, this writing/storing occurs as the items **930** are passed by the RFID writer **920** (and see also **Fig. 10A, Block 1020**, stating that the correlator is written to each item’s RFID tag). Otherwise, if the correlator is not written to each of the RFID tags, when the shopper exits the premises with his computer system and takes his merchandise past RFID reader **960** in **Fig. 9B**, the absence of the unique, transaction-specific correlator value in the RFID tags of the items will be detected (**Blocks 1080**, “No” response; **1090**, “No” response; and **1095**), as discussed on Page 18, lines 6 - 13 and lines 17 - 20 of Appellants’ specification, stating “then this is potentially an attempted theft ... and the alarm unit **990** is preferably triggered”. On the other hand, if the items making up the “computer system” discussed in the Examiner’s Answer do not have their own RFID tags,

then there is no way to write correlators to the individual items and the present invention has no application.

4(d). With regard to the “buy one, get one at 50% discount” scenario that is presented in the Examiner’s Answer on Page 5, lines 13 - 16, Appellants respectfully submit that the Examiner has misunderstood their claimed invention. Appellants claims do not specify techniques for ensuring that all purchased items are present. Instead, Claims 1 and 3 are directed toward determining whether a group of items possessed by a shopper were all purchased in one transaction (which, in turn, enables detecting potential theft). Accordingly, Appellants’ claim limitations address items that are extra, but not items that are missing. The “potential theft” detection addressed by these claims is further discussed in Appellants’ specification on Page 13, lines 17 - 20, explaining that “The shopper may be concealing items ... which were not presented at the point of sale [i.e., which were not paid for] ... Or, the shopper may have substituted a more expensive item, or several of the same item, in place of one paid for”. In these scenarios addressed by Appellants’ claims, the concealed or substituted items will not have the correlator value found in the paid-for items (and they are therefore “extra” items with regard to that transaction), because it will not be written therein by Claim 1’s “storing” limitation, and this absence of the correlator value will be detected according to Claim 3’s “concluding” limitation.

4(e). Accordingly, Appellants respectfully disagree with the Examiner’s newly-presented motivation for combining Otto and Loof.

5. On Page 6, lines 5 - 6 of the Examiner's Answer, the Examiner states that "Appellant further argues that 'transactional information' is not a correlator value of the instant application". Appellants respectfully note that their claim language uses the term "unique" correlator value (that is, a "unique correlator value, for a current transaction" as claimed by Appellants in line 3 of independent Claim 1, emphasis added, and a "correlator value ... as a unique, transaction-specific value" as claimed by Appellants in lines 4 - 5 of independent Claim 3, emphasis added), whereas the Examiner apparently overlooks the limitation that the correlator value is "unique". Appellants have explained, in paragraphs 12, 13, 15, 16, 19, 22, and in particular, paragraph 25 of Appellants' Appeal Brief that whereas Otto and Loof discuss use of date and time, location, and seller information, combining these values fails to generate a unique correlator value.

6. On Page 6, lines 7 - 9 of the Examiner's Answer, the Examiner states that Otto's "purchase information" can be considered an embodiment of Appellants' correlator value. Appellants respectfully note that this position is in direct contradiction to the Examiner's admission in the Final Office Action, where the Examiner stated that "Otto fails to specifically teach or fairly suggest that the RFID tags contain a correlator value ...". See the Final Office Action, Page 3, lines 7 - 8. This has been discussed, above, in Paragraph 3.

7. On Page 6, lines 9 - 11 of the Examiner's Answer, the Examiner cites paragraph 3 in Section (9), **Grounds of Rejection**, of the Examiner's Answer as providing "a motivation conceivable by one [of] ordinary skill in the art". Appellants respectfully note that the cited motivation is irrelevant to their claimed invention, as has been discussed, above, in Paragraph 4.

8. On Page 6, lines 12 - 13 of the Examiner's Answer, the Examiner states that "In Paragraph 10, Appellant argues ...". Appellants respectfully disagree, and note that the language quoted by the Examiner is not Appellants' argument. Rather, in Paragraph 10 of Appellants' Appeal Brief, Appellants were quoting language argued by the Examiner on Page 3, lines 7 - 8 of the Final Office Action.

9. Page 6, lines 14 - 15 of the Examiner's Answer states "It is the Examiner's position that RFID tag disclosed in Otto contains a correlator value -- transaction information.". Appellants respectfully note that this is a new position, in direct contradiction to the Examiner's admission on Page 3, lines 7 - 8 of the Final Office Action (as discussed above in Paragraph 3). The Examiner then states that "The correlator value does not show that the group of items are purchased together." (emphasis added) and that "The feature of grouping them [the items] together in one transaction is shown in Loof". Appellants respectfully agree that Otto has no correlator value usable to show that a group of items are purchased together, but respectfully disagree that Loof teaches grouping items of a transaction using a unique, transaction-specific correlator. In the Final Office Action, the Examiner states that "Since the customer's visit ... is also tracked, reading the purchase information from the tag, the plurality of items can be grouped together by purchase date and time." (See the Final Office Action, Page 3, lines 14 - 16.) Appellants have explained, in Appellants' Response to the Final Office Action (see Page 13, lines 5 - 10 thereof) and in Paragraph 19 of the Appellants' Appeal Brief, that "purchase date and time" is patently distinct from their unique, transaction-specific correlator values.

10. On Page 6, lines 17 - 22 of the Examiner's Answer, the Examiner cites paragraphs [0003], [0015], and [0041] of Appellants' specification for discussions of correlator values. (These paragraphs correspond to Page 2, lines 7 - 9; Page 6, line 20 - page 7, line 1; and Page 15, lines 9 - 18 of Appellants' specification.) Paragraph [0041] of Appellants' specification discusses creating the correlator for each transaction as "a unique value" (Page 15, lines 11 - 12 of Appellants' specification), and states that "Examples of data that may be used in this process ... include the current date and time, the register number of a cash register ..., a transaction identifier, a customer number concatenated with a counter ..., and so forth. As another example, the correlator might be formed simply by using a counter ...". The Examiner's Answer states, with reference to this text, "It is in effect the purchase information disclosed in Otto". Appellants respectfully disagree with this interpretation. Note that the examples given in Appellants' specification are explicitly specified as "data that may be used in this process" (emphasis added), and not "data that may be used for this process". That is, the cited examples are potential inputs, but it will be obvious that by themselves, several of these example inputs are insufficient for generating unique values. For example, a cash register number cannot be used as the correlator, because the cash register number is not a "unique correlator value, for a current transaction" (Claim 1, line 3, emphasis added) or a "unique, transaction-specific value" (Claim 3, line 4, emphasis added), but the register number can be used as an input in the process of generating a unique correlator value. Similarly, the current date and time cannot be used as the correlator, because they will not provide a unique correlator value for each transaction, but the current date and time can be used as input in the process of generating a unique correlator value.

11. On Page 7, lines 3 - 20 of the Examiner's Answer, the Examiner discusses whether Otto and Loof disclose a database, referring to Paragraphs 11 and 29 of Appellants' Appeal Brief. Appellants do not dispute that Otto and Loof use a database. Paragraph 11 of Appellants' Appeal Brief argues that the customer "purchasing habits" described by Loof are specified therein as being stored in a database, in contrast to Appellants' storing of unique correlator values in RFID tags affixed to items. Paragraph 29 of Appellants' Appeal Brief argues, with regard to dependent Claims 2, 9, and 16, that the detailed limitations specified therein are not taught simply by the fact that Loof may have (as argued by the Examiner on Page 3, lines 16 - 20 of the Final Office Action) an "extensive" database.

12. On Page 7, lines 7 - 8 of the Examiner's Answer, the Examiner states "Promotion file is used in retrieving a likely promotional item based on the item [being] identified by previous purchase ... suggesting a link between item in the inventory file and associated promotion for that item" (emphasis added), citing Otto, col. 2, lines 50 - 55. Appellants respectfully disagree with this statement, noting that the cited text pertains to an item being identified as purchased in a different store ("... contains purchase information from the other store"; col. 2, line 50), not from a "previous purchase" that would somehow link Otto's inventory file and associated promotions.

13. On Page 7, lines 21 - 22 of the Examiner's Answer, the Examiner states that "In Paragraph 25, Appellant concedes ...". Appellants respectfully disagree, and note that the language quoted by the Examiner is not Appellants' concession. Rather, in Paragraph 25 of Appellants' Appeal Brief, Appellants were quoting a concession of the Examiner from Page 4,

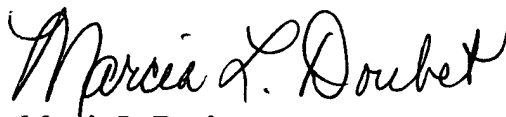
lines 4 - 6 of the Final Office Action.

14. Because Otto and Loof fail to teach limitations that align with the language of Appellants' independent Claims 1, 3, 8, 10, 15, and 17, as demonstrated herein and in Appellants' Appeal Brief, Appellants maintain their position that these references fail to make out a *prima facie* case of obviousness under 35 U. S. C. §103 with regard to Appellants' independent claims. Therefore, a *prima facie* case of obviousness is also not made out with regard to Appellants' dependent claims.

CONCLUSION

In view of the above, Appellants respectfully submit that the rejection of appealed Claims 1 - 21 is overcome. Accordingly, it is respectfully urged that the rejection of appealed Claims 1 - 21 not be sustained.

Respectfully submitted,



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